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THE MACHRIS BRAZILIAN EXPEDITION
BOTANY: *LYTHRACEAE*

By A. LOURTEIG



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DAVID K. CALDWELL
Editor

THE MACHRIS BRAZILIAN EXPEDITION

BOTANY: *LYTHRACEAE*

By A. LOURTEIG¹

ABSTRACT: Two new species, *Diplusodon astictus* and *D. caesariatus*, are described from Brazil. Species of the genus *Cuphea* collected in Brazil are discussed.

The specimens of *Lythraceae* received from the Los Angeles County Museum were collected by Dr. E. Yale Dawson and my determinations already have been listed by him (Dawson, 1962:6). The present paper reviews some of these determinations.

Two species of *Cuphea* were collected. *C. polymorpha* St. Hilaire is, to my knowledge, the first record for the State of Goiás. The species occurs in Paraguay and in Brazil (States of São Paulo, Rio de Janeiro and Minas Gerães).

C. fuchsiifolia St. Hilaire and *C. Gardneri* Koehne are known primarily from the type collections, but the latter also from a specimen of Schwacke destroyed in Berlin and of which I have seen no duplicates. Both species are very closely related. Whether they should be considered as subspecies of one species or as two distinct species is difficult to say at present; much more material from different localities is needed. The specimen collected by Yale Dawson (14428) which I annotated as *C. fuchsiifolia* St. Hil. shows a pubescence of the leaves that would not match exactly either of the two species, and that of the stem approaches *C. Gardneri*. The size and shape of the calyx, characters to

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Fig. 1. *Diplusodon astictus*: a, branch, x $\frac{1}{2}$; a', detail of an inflorescence, x 1; b, leaf, lower surface, x 1.5; b', the same, detail of the apex, x 6; c, flower without corolla, x 3; d, anther, x 6; e, calyx with fruit, x 3. From the type and isotype.

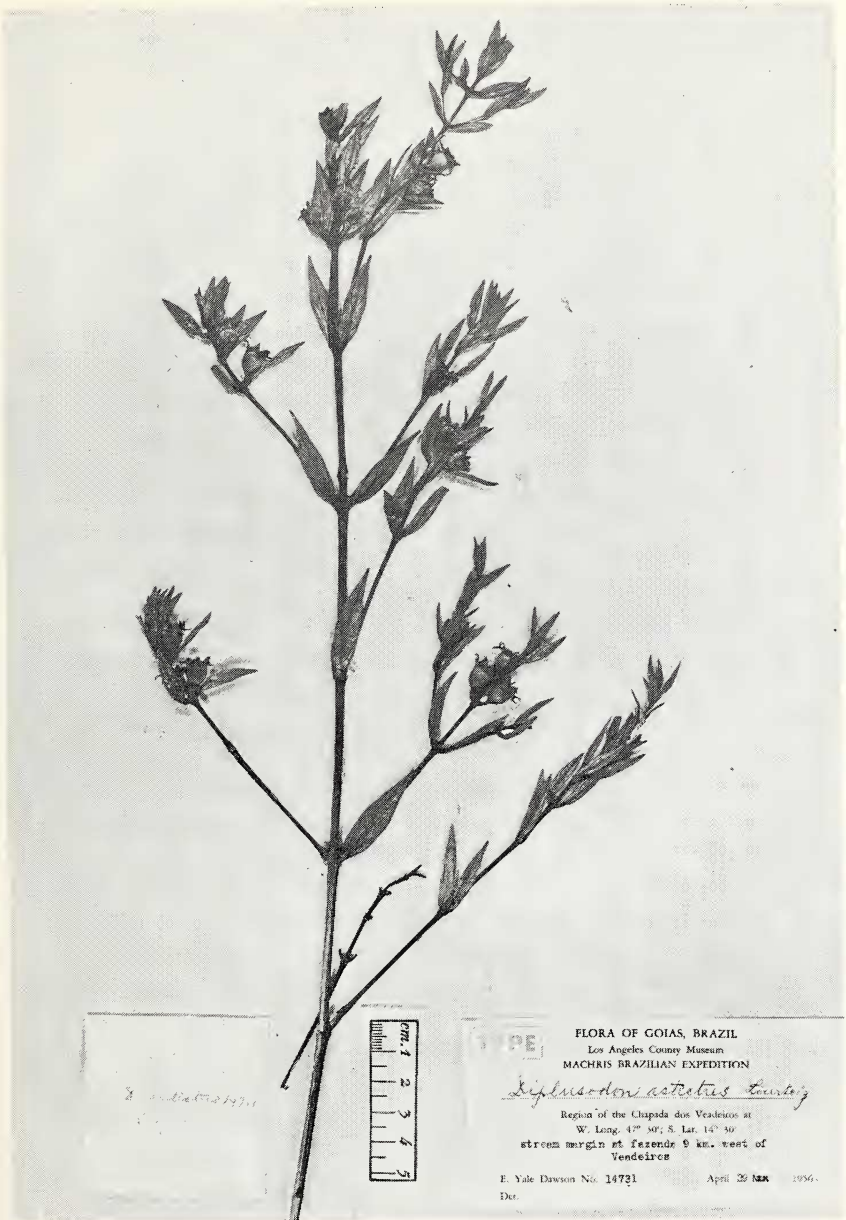


Fig. 2. *Diplusodon astictus* Lourteig. The type specimen.

which Koehne assigns importance for keying out the two species, would lead us to *C. fuchsiifolia*. However, the shape of the leaves and the general facies of the specimen have led me to file it under *C. Gardneri* Koehne.

Nine specimens of *Diplusodon* were collected. Seven of these were already recorded for Goiás, but in several instances only on the evidence of the type collection. One specimen has not been listed because I did not recognize it. It was necessary for me to revise some other collections that were not represented in Paris in order to establish the correct names. The specimen annotated by me (*In* Dawson, 1962:6) as *D. incanus* proved, after comparison with the types of that species and its allies, to be a new species.

***Diplusodon astictus*² Lourt., n. sp.**

Figures 1 and 2

Sectio 1. Subuninerves. Series 2.

Fruticulus glaberrimus (alt. ignota), laxe ramosus, ramis decussatis. Internodia longa, usque ad 7 cm. Folia caulina internodiis breviora, in ramulis longiora, sessilia, lanceolata (25-40 x 4-9 mm), acuta vel acutiuscula, coriacea, subrigida, epunctata, nervo medio fusco, valde prominente, 1 vel 2 paribus nervorum lateralium prominulis vel parum conspicuis, marginibus subrevolutis.

Flores in ramulis multi, decussati, pedunculati (± 2 mm). Bracteolae oblongae, 1-nerviae, subacutae, tubo calycino subaequales. Calyx subcoriaceus, urceolato-campanulatus (± 8 mm); lobi dimidium tubi aequantes, triangulares acuti, acuminati; appendices lobis paullo breviores, curvato-reflexae. Petala roseo-violacea ? ($\pm 14 \times 7$ mm), oblongo-subspathulata. Stamina 12, lobos subaequantia v. paullo superantia. Ovarium subglobosum. Ovula 25. Stylus calycem duplo superans.

Habitu *D. punctato* Pohl simili; foliis punctis carentibus et appendicibus calycinis bene evolutis differt.

Typus: BRAZIL, Goiás, region of the Chapada dos Veadeiros at W. Long.

²From the Greek, *αστικός*, epunctate.

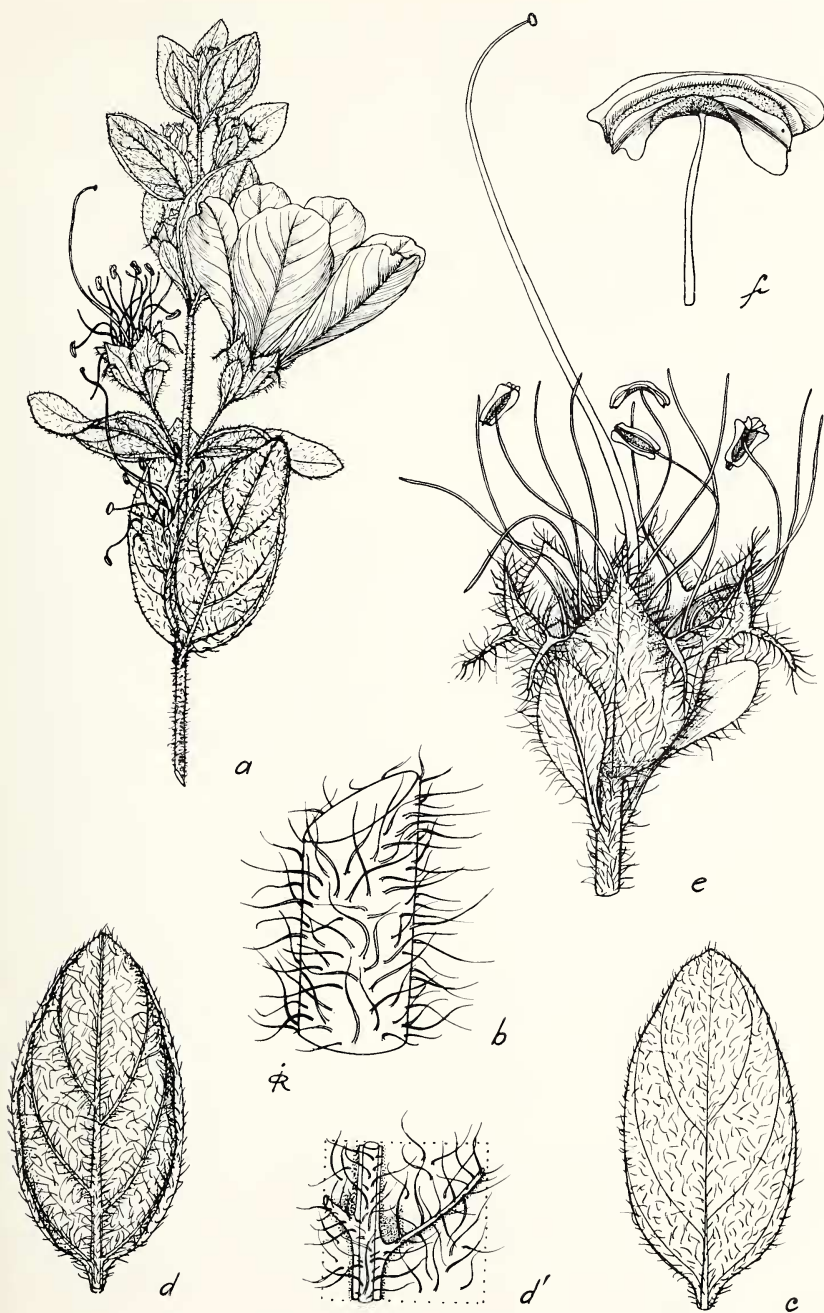


Fig. 3. *Diplusodon caesariatus*: a, apex of a branch, x 1.5; b, detail of the stem, x 10; c, leaf, upper surface, x 3; d, the same, lower surface; d', detail of d, x 6; e, flower without corolla, x 4; f, anther. From the type.



Fig. 4. *Diplusodon caesariatus* Lourteig. The type specimen.

47° 30'; S. Lat. 14° 30', stream margin of fazenda 9 Km west of Veadeiros, leg. E. Yale Dawson (14731) 29 IV 1956, U.S. Isotypus, P.

Very near to *D. punctatus* Pohl which it resembles in its habit. It differs in the absence of punctations and in the presence of appendices on the calyx.

***Diplusodon caesariatus*³ Lourt., n. sp.**

Figures 3 and 4

Sectio 2. Penninerves. Series 4.

Frutex 3 m altus, ramosissimus, dense foliatus, omnibus partibus incanovilloso-hirtellis. Ramuli subteretes minute hirtelli. Internodia usque 3 cm. longa vel brevissima. Folia internodiis longiora, ovato-oblonga vel elliptica (15-26 x 6-15 mm), subacuta, margine subrevoluta, penninervia, utroque latere costae 2 v. 3 paribus, nervorum supra impressis, subtus prominulis, subsessilia; pagina inferiore villosa-hirtella pilis secus nervos longioribus superiore pilis sparsis atque brevioribus.

Flores decussati; pedunculus hirtellus (3-4 mm); bracteolae ca. apicem insertae, tubo calycino aequilongae v. paullo minores, obovato-ellipticae, l-nerviae, basi attenuatae, pubescentia ei calycis simillima. Calyx (5-6 mm) campanulatus, villosus; lobi acuti, ciliati, tubi ½-⅓ aequilongi, erectiusculi; appendices lobis aequilongae v. subaequilongae, patulae vel ± reflexae. Petala roseo-violacea, obovata vel suborbicularia (15-17 x 10-12 mm). Stamina 16, lobos duplo superantia. Ovarium obovoideum vel subglobosum, complanatum. Ovula 22-26. Stylus 2½-3½-plo calycem superantia. Stigmata crassa.

Species *D. incano* Gardner simillima, magnitudine foliorum, florumque, praetera pubescentia (hirsuta) et magnitudine bracteolarum differt. Affinis *D. humili* Koehne et *D. pulchellae* Koehne (Ser. 7) est; differt appendicibus calycinis et longitudine bracteolarum.

Typus: BRAZIL, Goias, region of the Chapada dos Veadeiros at W. Long. 47° 30'; S. Lat. 14° 30', in gallery forest area along road 19-19½ Km north of São João da Aliança, leg. Yale Dawson (14397) 19 IV 1956, P.

³From the Latin, *caesariatus*, covered with long hairs.

Following Koehne's key (*Pflanzenreich* 188, 190) we are led to *D. incanus* Gardner which agrees with the new species in its main characters, but differs in that its leaves and flowers are much smaller; the pubescence is also different. The new species is related to *D. humilis* Koehne and *D. pulchella* Koehne especially in its pubescence; it differs in the appendices of the calyx which are equal or nearly equal in length to the calyx lobes, and in the relative size of the bracteolae.

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